

Socio-Economic and Demographic Factors Shape Fertility Preferences at Sudurpaschim Province in Nepal

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Abstract

Background: Fertility preferences as reproductive behavior indicators and socio-economic demographic determinants. Nationally, fertility decline in Nepal doesn't conclude regional disparity, especially Sudurpaschim Province. The study aims to examine the factors that affect fertility preferences of reproductive-age women.

Methods: A cross-sectional, population-based analysis of secondary data collected from the NDHS 2022 was used. The study's respondents were 1,627 women aged from 15- 49 years. The unadjusted associations were analyzed through descriptive statistics and chi-square tests followed by multivariable logistic regression to estimate aORs with their 95 percent confidence intervals for key predictors. The analysis also incorporated sampling weights and complex survey design variables.

Results: Descriptive findings indicate that women's fertility preferences are greater among the poorer, younger, and those with secondary education. The aspirations of fertility desire were highest among younger women between 15-19 years (19.2%) and lowest in that group of women among the age categories 40 and beyond. Among the independent variables in the adjusted regression model, age is by far the strongest predictor, with women aged 20–24 and 25–29 age categories wanting additional children significantly more than other age groups (aOR = 0.056 and 0.028, respectively; $p < 0.001$). The significance of education, occupation, and media exposure disappeared with adjustment, suggesting mediation by factors related to demography.

Conclusion: Thus, age and its related life cycle dynamics are the primary determinants of fertility preferences in Sudurpaschim, rather than the traditional socio-economic. Policies should address reproductive education at different ages and promote early couple based age-specific family planning interventions in accord with region-specific social-cultural contexts.

Keywords: Fertility preference, Sudurpaschim Province, Nepal, NDHS 2022, socio-demographic factors

1. Introduction

The understanding reproduction behavior, population dynamics, and family planning results is fertility preference-aspiration towards having children at the level of individual or couple (Liefbroer et al., 2021; Raybould & Sear, 2021). They are thus seen as not just predictors of fertility behavior but also as indicators of wider social and economic changes. Nowadays, in many low and middle income countries like Nepal, people do not mind having to limit or space their births; however, the social contexts in which these preferences occur and are renegotiated vary widely by region, caste, gender, and level of economic success (Kodzi et al., 2012; Sedgh et al., 2016).

Major shifts in fertility have occurred recently in Nepal, especially underscored by the dramatic decline of the national Total Fertility Rate from 4.6 in 1996 to 2.1 in 2022 (MoHP, 2022). However, such is not the case in all sub-national entities; for instance, in Sudurpaschim, traditional family norms, low education levels among women, and limited geographic access to reproductive health services continue to influence fertility behavior (Acharya et al., 2023). Sudurpaschim Province is in the far west of the country and suffers from characteristics of geographical remoteness, high poverty levels, and strong patriarchal social structures that make this province a key area of inquiry on the determinants of fertility preferences under conditions of relative developmental disadvantage and cultural traditionalism.

Socio-economic predictors like education, income, and occupation are now established predictors of fertility preferences (Testa et al., 2014; Bongaarts, 2020). With greater education among women, in general, those marry later, enjoy greater independence, and desire fewer children since education broadens options in life and increases the opportunity costs associated with childbearing (Kravdal, 2022). Similarly, those wealthier households would express preference for small families as they relate this to quality of child-rearing and increased working by women (Lee & Choi, 2021). Media exposure and residence in urban areas, as well as partner communication, also impact fertility desires since these factors mold knowledge about reproduction and change norms about ideal family size (Marteletto et al., 2020; Watkins et al., 2022).

Fertility purposes connection with demographic factors like age, number of living children, and marital status. Younger women or women who have no living children tend to want additional births; whereas older women or women who have had multiple births tend to want to stop having births altogether (Guzzo & Hayford, 2018). In contexts where strong a preference exists for sons, women may well continue wanting more children until their gender related expectations are realized (Bhat & Zavier, 2019). The demographic patterns can further strengthen in rural and conservative areas like Sudurpaschim, in which the fertility decision is not merely a matter of personal choice but also a decision affected by the extended family perceptions and community norms. South Asian literatures also reflect upon the stage of gender norms and fertility preferences. Preferences of women would, in many of the patriarchal societies, be soft aside and dominated by the wishes of husbands and in laws, thus limiting their agency in reproduction decisions (Singh et al., 2021). Evidence from studies conducted on India and Bangladesh reveals that women who have lesser autonomy have also lesser

chances of using contraception, even if they have a wish to delay or limit the birth of children (Haider et al., 2020; Nasrullah et al., 2023). Similar constraints among marginalized caste and ethnic groups in the western hills and plains of Nepal have also been documented, indicating that the translation of fertility preferences into results becomes complete complicated (Poudel & Joshi, 2021).

It is critical to know fertility preferences for reproductive health results improvement and unmet need reduction. Women who wish to limit or space births but do not have access to family planning services are at risk of unintended pregnancies, maternal complications, and poor child health (Guttmacher Institute, 2022). An analysis of fertility preferences could provide such important insights into the demand side resource dimensions and the targeting of interventions in provinces like Sudurpaschim, which have covered behind the national averages on reproductive health indicators.

Fertility behavior in Nepal, which has attracted growing scholarly attention, is on the other hand, presumed to represent national level trends in the analytical studies rather than fertility results, that is, the number of children born, contending that few attempts have so far been made to disaggregate findings by province or focus more on the Sudurpaschim area, which rather has been one out of the least studied of all regions due to this socio-cultural landscape and demographic patterns. In addition, the role of caste, education, spouse characteristics, and rural-urban differences with their intersections on fertility desires seems to have received less attention.

This study takes on the very significant under-researched area in demographic and reproductive health studies in Nepal, fertility preferences. Earlier studies have generalized their findings for the national population or addressed only direct fertility results; this study carefully avoids these approaches to analyze preference as a view of reproductive behavior. A socio-demographic framework is used to salient predictors, namely age, education, wealth, caste/ethnicity, occupation, and media exposure, providing information for theory and policy. The health programming at the provincial level, particularly with the decentralized governance system in Nepal, and help develop culturally sensitive reproductive health programs. By showcasing regional variation in fertility preferences, this manuscript supports the global literature on fertility transition in LMICs and contributes to understanding how structural and cultural environments diffuse into reproductive aspirations.

2. Methods

This study assesses the influence of socio-economic and demographic factors on fertility preferences among ever-married women of reproductive age in Sudurpaschim Province. The strength of association between predictor variables and fertility desire was assessed using edited multivariable logistic regression.

Study design: The NDHS 2022 national representative data were employed in a cross-sectional population-based analytical study design. For NDHS, samples were selected using a stratified two-stage cluster sampling methodology representing the nation and provinces. This data analyses likely focuses only on women aged 15–49. Fertility preference, defined as the

desiring to have more children, becomes the result of this study.

Sample and sampling procedure: NDHS 2022 used a two-stage stratified sampling procedure. First, enumeration areas (EAs) were selected with probability proportional to size within the defined urban and rural strata. In the second stage, a systematic random sample of households was drawn from each selected EA. Therefore, women aged 15-49 years residing in Sudurpaschim Province who provided complete responses on fertility preference were included in this study. Those observations were excluded from the analysis that carried missing or inconsistent data in order to keep the analysis strong. To correct for the unequal probabilities of selection and ensure the results reflect the population structure of the province, sampling weights and design variables were applied.

Data analysis methods: The socio-economic and demographic attributes responded to the descriptive statistics. Bivariate analyses were performed first using chi-square tests to examine unadjusted associations between independent explanatory variables and fertility preference. The multivariable logistic regression model contained those variables that had a significant bivariate association. Result measures were given in terms of adjusted odds ratios (AORs) with respective confidence intervals (CIs) of 95%. A p-value of less than 0.05 was regarded as significant. Population level estimates were derived by considering complex survey features like sample weights, clustering, and stratification.

Ethical consideration; The study made use of openly available secondary data of 2022 NDHS, an implementation of the Ministry of Health and Population in partnership with ICF (MoHP, 2022). Ethical clearance for the original data collection has been obtained by implementing agencies. Data were fully anonymized before being released, thereby ensuring strict confidentiality and privacy. There were no personal identifiers accessed during the analysis and study posed no harm to the respondents.

3. Results

Table 1 shows that fertility preferences among women in the reproductive age group of Nepal, disaggregated by different socio-economic and demographic variables. The findings present different patterns across wealth quintiles, education, age groups, occupations, and media exposure. Fertility preference was comparatively high for the poorest quintile (14.6%) in comparison to the richest quintile (4.8%), which may indicate that a high desired number of children might be a possible managing strategy for labor support and economic security within a compromised economic setting. Women with secondary education had the highest fertility preference of 27.2 percent, while women with no education had the lowest preference of 1.6 percent. Partner education was also a determinant as where the partner had secondary education, the preference was 15.1 percent, but where the partner had no education, it was only 1.0 percent. Age showed a distinct inverse association with fertility preference, in that younger women (15-19) expressed the greatest desire for children (19.2%), whereas women aged 40 and above expressed almost negligible desire.

Urban areas were reported as favoring a larger family size (25.3%) than rural areas (17.0%), which may find explanation in perhaps better access to reproductive health services and higher

awareness in urban areas. The occupation with the highest preference for children was farming (20.9%), while technical and clerical occupations had lesser preference. There were caste and ethnic based differences, where Hill Chhetri women had the highest preference for children (19.4%), followed by Terai Janajati women (11.8%). The highest fertility preference was among Hindu women (40.9%) compared to women of other religious groups, indicating a possible cultural limitation or religious influence on reproductive decisions. Media exposure had a subtly significant role, with women who read newspapers less than once per week (12.3%) and those who listened to the radio at least once per week (16.3%) reporting higher fertility preferences than their equivalents without such media exposure. Interestingly, women who watched television regularly did not show comparatively greater fertility intentions, suggesting that some media forms may shape reproductive beliefs more strongly than others.

Table 1 Fertility preferences across women’s socio-economic status and their demographic characteristics, Sudurpaschim Province

Variables	Number(N)	Percent(%)	Fertility preferences	
			No (%)	Yes (%)
Socio-economic variables				
Wealth quintile				
Poorest	715	36.6	22.0	14.6
Poorer	312	20.9	11.5	9.4
Middle	247	16.6	9.3	7.3
Richer	208	15.2	9.1	6.1
Richest	145	10.8	6.0	4.8
Level of education				
No education	411	23.8	22.2	1.6
Primary	482	29.7	17.6	12.2
Secondary	694	43.7	16.5	27.2
Higher	40	2.8	1.5	1.3
Partner’s level of education				
No education	117	9.3	8.3	1.0
Basic	463	38.4	29.7	8.7
Secondary	531	43.3	28.3	15.1
Higher	101	8.6	5.9	2.7
Highest	5	0.3	0.3	

Demographic variables				
Age				
15–19	350	20.4	1.2	19.2
20–24	348	22.0	7.7	14.3
25–29	291	18.3	12.6	5.7
30–34	227	14.3	11.9	2.4
35–39	185	11.3	10.8	0.6
40–44	125	7.6	7.5	0.1
45–49	101	6.1	6.1	
Residence				
Urban	826	60.3	35.0	25.3
Rural	801	39.7	22.7	17.0
Occupation				
Not working last 12 months	349	22.8	9.6	13.2
Professional/technical	72	5.0	3.4	1.5
Clerical	12	0.9	0.6	0.2
Sales and service	66	4.5	2.9	1.7
Skilled manual	46	2.8	1.4	1.5
Unskilled manual	117	7.7	4.5	3.2
Agriculture	964	56.3	35.4	20.9
Other	1	0.1		0.1
Caste/ Ethnicity				
hill Brahmin	189	11.0	6.3	4.8
hill chhetri	828	47.8	28.5	19.4
terai brahmin/chhetri	7	0.5	0.4	0.1
other terai caste	12	0.7	0.6	0.2
hill dalit	186	11.3	6.8	4.5
terai dalit	6	0.6	0.1	0.5
Newar	2	0.2	0.1	0.1
hill janajati	23	1.8	0.7	1.0

terai janajati	373	26.0	14.2	11.8
Muslim	1	0.1	0.1	
Religion				
Hindu	1,580	96.5	55.6	40.9
Buddhist	9	0.7	0.4	0.3
Muslim	1	0.1		0.1
Christian	37	2.7	1.7	1.0
Frequency of reading newspaper or magazine				
Not at all	1,213	72.8	44.7	28.1
Less than once a week	361	23.5	11.2	12.3
At least once a week	53	3.8	1.8	1.9
Frequency of listening to radio				
Not at all	369	24.5	16.0	8.5
Less than once a week	677	41.0	23.6	17.4
At least once a week	581	34.5	18.1	16.3
Frequency of watching television				
Not at all	813	45.0	27.6	17.5
Less than once a week	439	28.6	16.5	12.1
At least once a week	375	26.4	13.7	12.7

Source: Computed from 2022 NDHS

Table 2 was actually unadjusted (Model 1) and adjusted (Model 2) logistic regression results identifying socio-economic and demographic factors associated with preferences for fertility. Women in reproductive age groups considered to have been Nepali. In the unadjusted model, significant associations between infertility preferences and several variables including the attainment of education and that of their partners, age, occupation, media exposure were observed. Women with no education were much less likely to want the additional children (cOR = 0.089, $p < 0.001$); this association lost significance and strength after adjustment (aOR = 0.307). A similar pattern was recorded against the education of partner where the subject with no educated partner indicated a significantly lower fertility preference in the crude model (cOR = 0.275, $p < 0.001$), yet this effect disappeared in the adjusted model. Among employment groups, the largest advantage went to women not working during the past 12 months, as revealed in Model 1 (cOR = 2.367, $p < 0.01$), but lost this advantage when the control variable entered the analysis, suggesting that simple employment status may not alone account for the fertility desires of these women.

Therefore, age turned out to be the most important and consistent determinant in both models. Compared with the reference category (45–49), younger women were found to show significantly high odds of wanting to have more children even after adjustment (aOR = 0.056 and 0.028 respectively, both $p < 0.001$) in the age (20–24 and 25–29). Their rural residence was only marginally significant in the adjusted model (aOR = 1.558, $p < 0.10$), but suggested that there was possibly more preference for fertility among rural women not controlling other variables. In the unadjusted model, media exposure, especially not watching television and not listening to radio, significantly reduced fertility intents (e.g., not watching TV: cOR = 0.685, $p < 0.01$), but these effects did not persist in the adjusted model. Caste/ethnicity and religion failed to yield consistent as well as statistically significant effects in neither model. Overall, the adjusted analysis shows that the most important factor was age while other influences of educational level, occupation at which one was employed, and media exposure appear to have been moderated by other demographic characteristics.

Table 2 Socio-economic and demographic factors associated with fertility preferences among women of reproductive age in Sudurpaschim Province

Variables	Model 1 cOR 95% CI	A Model 2 aOR 95% CI
Socio-economic variables		
Wealth quintile		
Poorest	0.826 (0.53–1.28)	0.711 (0.28–1.80)
Poorer	1.022 (0.64–1.64)	0.592 (0.26–1.37)
Middle	0.980 (0.60–1.61)	0.870 (0.37–2.04)
Richer	0.841 (0.51–1.39)	0.612 (0.27–1.40)
Richest	Ref	Ref
Level of education		
No education	0.089 (0.04–0.22)***	0.307 (0.08–1.26)
Primary	0.841 (0.38–1.85)	0.342 (0.09–1.26)
Secondary	2.002 (0.92–4.37)*	0.567 (0.17–1.90)
Higher	Ref	Ref
Partner's level of education		
No education	0.275 (0.11–0.70)***	1.043 (0.30–3.61)
Basic	0.645 (0.35–1.18)	0.894 (0.38–2.10)
Secondary	1.182 (0.66–2.11)	0.841 (0.40–1.79)
Higher	Ref	Ref
Demographic variables		

Age		
15–19	0.113 (0.06–0.22)***	0.197 (0.08–0.49)***
20–24	0.027 (0.01–0.05)***	0.056 (0.02–0.14)***
25–29	0.012 (0.01–0.03)***	0.028 (0.01–0.08)***
30–34	0.003 (0–0.01)***	0.008 (0.00–0.03)***
35–39	0.001 (0–0.01)***	.002 (0.00–0.03)***
40–44	0.113 (0.06–0.22)***	0.197 (0.08–0.49)***
Residence		
Urban	Ref	Ref
Rural	1.033 (.80–1.34)	1.558 (0.97–2.49)*
Occupation		
Not working	2.367 (1.22–4.61)**	0.857 (0.33–2.25)
Professional/technical	0.763 (0.32–1.81)	0.490 (0.14–1.71)
Clerical	0.708 (0.14–3.56)	0.173 (0.01–3.75)
Sales/service (Ref)	Ref	Ref
Skilled manual	1.870 (0.71–4.90)	0.638 (0.15–2.77)
Unskilled manual	1.250 (0.58–2.68)	0.822 (0.25–2.71)
Agriculture	1.023 (0.54–1.93)	0.590 (0.24–1.44)
Caste/ Ethnicity		
Hill brahmin (Ref)	Ref	Ref
Hill chhetri	0.897 (0.59–1.37)	0.752 (0.38–1.51)
Terai brahmin/chhetri	0.303 (0.03–3.39)	0.751 (0.04–16.01)
Other terai caste	0.352 (0.06–2.19)	0.965 (0.09–10.94)
Hill dalit	0.0864 (0.50–1.48)	0.883 (0.35–2.20)
Terai dalit	6.233 (0.69–56.02)	2.592 (0.08–80.42)
Newar	1.317 (0.07–26.03)	5.355 (0.17–166.05)
Hill janajati	1.808 (0.65–5.06)	2.108 (0.28–15.87)
Terai janajati	1.092 (0.69–1.72)	1.280 (0.57–2.88)
Religion		
Hindu	Ref	Ref

Buddhist	1.147 (0.26–5.06)	2.185 (0.02–276.34)
Christian	0.772 (0.35–1.73)	0.638 (0.17–2.46)
Frequency of reading newspaper or magazine		
Not at all	0.604 (0.31–1.17)	0.790 (0.26–2.38)
Less than once a week	1.054 (0.53–2.12)	0.717 (0.24–2.18)
At least once a week	Ref	Ref
Frequency of listening to radio		
Not at all	0.589 (0.42–.83)***	0.623 (0.35–1.12)
Less than once a week	0.818 (0.61–1.10)	.788 (0.49–1.26)
At least once a week	Ref	Ref
Frequency of watching television		
Not at all	0.685 (0.50–0.93)**	0.838 (0.45–1.57)
Less than once a week	0.792 (0.56–1.11)	0.959 (0.54–1.69)
At least once a week	Ref	Ref
N	1627	1119
Pseudo R²	0- 0.395	0.274

Exponentiated coefficients; 95% confidence intervals brackets

cOR crude odds ratio, *aOR* adjusted odds ratio

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4. Discussion

This study examines have established that fertility preferences greatly differ among several socio-economic and demographic subgroups. Poorer households showed a greater desire for more children than among the wealthiest household. The highest preference for fertility was recorded among women from the poorest wealth quintile (14.6%), while the lowest was recorded among those from the richest quintile (4.8%). This indicates that in conditions of economic disadvantage, children tend to be viewed as economic contributors, which resonates with findings from similar low-income settings (Mishra & Retherford, 2000; Adhikari, 2010). Similarly, educational attainment was linked to fertility preferences. Among women having secondary education, the highest proportion (27.2%) expressed the desire to have more children, while a mere 1.6 percent reported no education. This scenario tells how education unpredictably plays and plays complex roles in the underlying reasons for women's intentions on reproduction. Though lower fertility is usually associated with higher education women, the great desire for children among those educated with secondary level might depict a transitional fertility behavior as affected by social mobility aspirations.

Another partner education level further reinforced the pattern of joint fertility decision-making. Women whose partners attained secondary education expressed a higher fertility preference than those with illiterate partners, suggesting the effect of shared knowledge, social values, and economic view to such extent in determining family size. Notably, age has been shown to be the strongest demographic determinant. Fertility preference was highest among the youngest age group (15-19, 19.2%) and declined sharply among women aged 35 years and above, as those in previous studies show that completed family size or declining biological fecundity leads to reduced fertility intentions with age. The difference in preference is great between the urban female population, which preferred more children (25.3%), than their rural counterpart (17.0%), deviated from most of the traditional assumptions and getting consideration on accessing reproductive health, income, and changing family aspirations because of being in urban settings.

To obtain a more thorough understanding of the observed patterns, multivariate logistic regression analyses were performed. For example, on controlling for confounding variables, education, occupation, and media exposure become less significant, with age being the strongest predictor variable. The odds ratios were respectively 0.056 and 0.028, $p < 0.001$, indicating that women aged 20-24 and 25-29 are more likely to express a desire for additional children compared to women 45-49 years of age. This suggests a life-cycle effect where reproductive intentions are determined as much by age as by socio-economic status. Women without education had very low odds of wanting to have children in the unadjusted model (cOR=0.089, $p < 0.001$), but this effect became statistically nonsignificant in the adjusted model (aOR=0.307). This attenuation indicates that the effect of education could be moderated by other structuring and demographic factors such as their partner's education, urban-rural domicile, and accessibility to media.

These interpretations are at odds with earlier literature that emphasized occupation and wealth as direct drivers to fertility intentions (Singh et al., 2019; Bongaarts, 2017).

In this case, occupation and wealth remained nonsignificant in the final adjusted model. For example, in the crude model, not working was substantially linked to increased fertility desire (cOR=2.367, $p < .01$), but was found to be non-significant after the adjustment. This indicates that while employment status influence fertility behavior, it does so in conjunction with other socio-demographics. Rural residence was also found to be cautiously significant (aOR=1.558, $p < 0.10$), with no effects seen with caste or ethnicity and religion; these indicate the more equalizing attitudes with regards to fertility across traditional identity groups. The change reflects the national reproductive health programs, growing education, and socio-culture in Nepal (Chhetri, 2018; Subedi, 2015).

Media exposure, especially radio listening and reading newspapers, significantly associated with fertility preferences in the unadjusted model, but the association faded in the adjusted model. For instance, women who did not listen to the radio were less likely-aspects pertaining to fertility preferences (cOR = 0.589, $p < 0.001$)-but this was not retained in Model 2 (aOR = 0.623). This suggests that media's effect on fertility is indirect, perhaps working through greater knowledge, delayed marriages, or informed use of contraceptives. Our interpretation is that

increasingly, in Nepal, reproductive intentions are shaped, and restructuring increasingly gives way to convergence comprised of biologically age-linked, relational, and socio-cultural factors.

Policy implications point to adolescent reproductive health education and couple-targeted initiatives as more effective than mere creating approaches income- or caste-targeted. Strengths and Limitations The major strength of this study is that researchers have utilized the relatively recent and nationally Nepali women of reproductive ages. The combination of descriptive and multivariate analyses adds further strength to the study conclusions. Restrictions comprise the cross-sectional design, which inhibits inference of causes, and reliance on self-reported data, which may be subject to recall and social desirability bias. In all, it also does not take in the male perspectives, crucial in fertility decision-making, and lacks qualitative evidence that can help contextualize the complex shapes under which fertility preference is directed. Research should be longitudinal and mixed method in future to understand such dynamics better.

5. Conclusion

The importance of age is one of the most critical determinants of fertility intention among reproductive-aged women in Sudurpaschim Province, Nepal, and is set against the background of declining influence exerted by the traditional socio-economic predictors of education, wealth, and occupation once demographic variables are accounted for. The findings point toward life-stage variations in reproductive intentions, where a greater number of children is realized as a greater desire by younger women, while women of older age express a desire to cease childbearing. Although education and media exposure appeared relevant for a while, their effects were mostly mediated through age and other demographic characteristics. Thereby, indicating a nuanced relationship exists between fertility goals and structural and individual-level determinants. Regardless of provincial differences and constantly shifting norms of fertility, reproductive health initiatives in Sudurpaschim should target age and couple-based strategies to empower women earlier in their reproductive life. This would put the policymakers in a position to strengthen access to youth-friendly family planning services, integrate reproductive education into school curricula, and support gender equitable decision-making within households. This will further promote informed, independent reproductive decisions through tailored outreach in rural and underserved populations and culturally relevant media campaigns.

AUTHOR CONTRIBUTIONS

Bijaya Mani Devkota, Tantrika Raj Khanal , Pradeep Kumar Bohara and Rekha Raut contributed to the study's conception, data extraction , analysis and drafted the manuscript. Laxmi Bashyal and Purushottam Khatiwada critically revised it. All authors agreed to submit the article in this form.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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ETHICS STATEMENT

The study was reviewed and approved by the ICF and NHRC; all ethical norms are followed thoroughly during and after the research.

DATA AVAILABILITY STATEMENT

The data used in this study are publicly available from the Demographic and Health Surveys (DHS) Program. The 2022 Nepal Demographic and Health Survey dataset can be accessed upon request at <https://dhsprogram.com>.

Conflict of Interest

The authors declare no conflict of interest related to this study.

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